

## **AMENDMENTS TO THE CLAIMS:**

Claims 1-117 are canceled without prejudice or disclaimer. Claims 118-179 are added. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-117 (Canceled.)

Claim 118. (New.) A nucleic acid encoding a variant of a parent *Bacillus stearothermophilus* alpha-amylase, wherein the variant has an amino acid sequence which has at least 95% homology to the parent *Bacillus stearothermophilus* alpha-amylase and comprises a deletion of amino acids 179 and 180, using SEQ ID NO:3 for numbering, and wherein the variant has alpha-amylase activity

Claim 119. (New.) The nucleic acid of claim 118, wherein the variant further comprises a substitution of a cysteine at amino acids 349 and 428, using SEQ ID NO:3 for numbering.

Claim 120. (New.) A nucleic acid construct comprising the nucleic acid of claim 118 operably linked to one or more control sequences that direct the production of the variant in a suitable expression host.

Claim 121. (New.) The nucleic acid construct of claim 120, wherein one or more control sequence directs the production of the variant in a bacterial host.

Claim 122. (New.) The nucleic acid construct of claim 120, wherein one or more control sequence directs the production of the variant in a fungal host.

Claim 123. (New.) A recombinant expression vector comprising the nucleic acid construct of claim 120.

Claim 124. (New.) A recombinant host cell comprising the nucleic acid construct of claim 120.

Claim 125. (New.) The recombinant host cell of claim 124, wherein the host cell is a bacterial cell.

- Claim 126. (New.) The recombinant host cell of claim 124, wherein the host cell is a fungal cell.
- Claim 127. (New.) The recombinant host cell of claim 124, wherein the host cell is a yeast cell.
- Claim 128. (New.) The recombinant host cell of claim 124, wherein the host cell is a species of *Bacillus*.
- Claim 129. (New.) The recombinant host cell of claim 124, wherein the host cell is selected from the group consisting of *Bacillus subtilis*, *Bacillus lentus*, *Bacillus brevis*, *Bacillus stearothermophilus*, *Bacillus alkalophilus*, *Bacillus amyloliquefaciens*, *Bacillus coagulans*, *Bacillus circulans*, *Bacillus lautus*, *Bacillus megaterium*, *Bacillus thuringiensis*, *Streptomyces lividans* and *Streptomyces murinus*.
- Claim 130. (New.) The recombinant host cell of claim 124, wherein the host cell is *Bacillus licheniformis*.
- Claim 131. (New.) A method for producing a variant alpha-amylase, which method comprises: (a) cultivating a host cell comprising the nucleic acid of claim 118 and (b) recovering the variant alpha-amylase from the host cell.
- Claim 132. (New.) The method of claim 131, wherein the host cell is a bacterial cell.
- Claim 133. (New.) The method of claim 131, wherein the host cell is a fungal cell.
- Claim 134. (New.) The method of claim 131, wherein the host cell is a yeast cell.
- Claim 135. (New.) The method of claim 131, wherein the host cell is a species of *Bacillus*.
- Claim 136. (New.) The method of claim 131, wherein the host cell is selected from the group consisting of *Bacillus subtilis*, *Bacillus lentus*, *Bacillus brevis*, *Bacillus stearothermophilus*, *Bacillus alkalophilus*, *Bacillus amyloliquefaciens*, *Bacillus coagulans*, *Bacillus circulans*, *Bacillus*

*lautus*, *Bacillus megaterium*, *Bacillus thuringiensis*, *Streptomyces lividans* and *Streptomyces murinus*.

Claim 137. (New.) The method of claim 131, wherein the host cell is *Bacillus licheniformis*.

Claim 138. (New.) The method of claim 131, wherein the variant alpha-amylase is secreted from the host cell.

Claim 139. (New.) A nucleic acid encoding a variant alpha-amylase, wherein the variant has at least 95% homology to SEQ ID NO:3 and comprises a deletion of amino acids 179 and 180, using SEQ ID NO:3 for numbering, and wherein the variant has alpha-amylase activity.

Claim 140. (New.) A nucleic acid of claim 139, wherein the variant further comprises a substitution of a cysteine at amino acids 349 and 428, using SEQ ID NO:3 for numbering.

Claim 141. (New.) A nucleic acid construct comprising the nucleic acid of claim 139 operably linked to one or more control sequences that direct the production of the variant in a suitable expression host.

Claim 142. (New.) A nucleic acid construct of claim 141, wherein one or more control sequence directs the production of the variant in a bacterial host.

Claim 143. (New.) A nucleic acid construct of claim 141, wherein one or more control sequence directs the production of the variant in a fungal host

Claim 144. (New.) A recombinant expression vector comprising the nucleic acid of claim 139.

Claim 145. (New.) A recombinant host cell comprising the nucleic acid construct of claim 141.

Claim 146. (New.) The recombinant host cell of claim 145, wherein the host cell is a bacterial cell.

Claim 147. (New.) The recombinant host cell of claim 145, wherein the host cell is a fungal cell.

Claim 148. (New.) The recombinant host cell of claim 145, wherein the host cell is a yeast cell.

Claim 149. (New.) The recombinant host cell of claim 145, wherein the host cell is a species of *Bacillus*.

Claim 150. (New.) The recombinant host cell of claim 145, wherein the host cell is selected from the group consisting of *Bacillus subtilis*, *Bacillus lentus*, *Bacillus brevis*, *Bacillus stearothermophilus*, *Bacillus alkalophilus*, *Bacillus amyloliquefaciens*, *Bacillus coagulans*, *Bacillus circulans*, *Bacillus lautus*, *Bacillus megaterium*, *Bacillus thuringiensis*, *Streptomyces lividans* and *Streptomyces murinus*.

Claim 151. (New.) The recombinant host cell of claim 145, wherein the host cell is *Bacillus licheniformis*.

Claim 152. (New.) A method for expressing a variant alpha-amylase, which method comprises: (a) cultivating a host cell comprising the nucleic acid of claim 139 and (b) recovering the variant alpha-amylase from the host cell.

Claim 153. (New.) The method of claim 152, wherein the host cell is a bacterial cell.

Claim 154. (New.) The method of claim 152, wherein the host cell is a fungal cell.

Claim 155. (New.) The method of claim 152, wherein the host cell is a yeast cell.

Claim 156. (New.) The method of claim 152, wherein the host cell is a species of *Bacillus*.

Claim 157. (New.) The method of claim 152, wherein the host cell is selected from the group consisting of *Bacillus subtilis*, *Bacillus lentus*, *Bacillus brevis*, *Bacillus stearothermophilus*, *Bacillus alkalophilus*, *Bacillus amyloliquefaciens*, *Bacillus coagulans*, *Bacillus circulans*, *Bacillus*

*lautus*, *Bacillus megaterium*, *Bacillus thuringiensis*, *Streptomyces lividans* and *Streptomyces murinus*.

Claim 158. (New.) The method of claim 152, wherein the host cell is *Bacillus licheniformis*.

Claim 159. (New.) The method of claim 152, wherein the variant alpha-amylase is secreted from the host cell.

Claim 160. (New.) A nucleic acid sequence encoding a variant of a *Bacillus stearothermophilus* alpha-amylase, wherein the alpha-amylase variant consists of a deletion of amino acids 179 and 180, using SEQ ID NO:3 for numbering.

Claim 161. (New.) A nucleic construct comprising the nucleic sequence of claim 160 operably linked to one or more control sequence that direct the production of the variant in a suitable expression host.

Claim 162. (New.) The nucleic acid construct of claim 161, wherein one or more control sequences directs the production of the variant in a bacterial host.

Claim 163. (New.) The nucleic acid construct of claim 161, wherein one or more control sequence directs the production of the variant in a fungal host.

Claim 164. (New.) A recombinant expression vector comprising the nucleic acid construct of claim 161.

Claim 165. (New.) A recombinant host cell comprising the nucleic construct of claim 161.

Claim 166. (New.) The recombinant host cell of claim 165, wherein the host cell is a bacterial cell.

Claim 167. (New.) The recombinant host cell of claim 165, wherein the host cell is a fungal cell.

- Claim 168. (New.) The recombinant host cell of claim 165, wherein the host cell is a yeast cell.
- Claim 169. (New.) The recombinant host cell of claim 165, wherein the host cell is a species of *Bacillus*.
- Claim 170. (New.) The recombinant host cell of claim 165, wherein the host cell is selected from the group consisting of *Bacillus subtilis*, *Bacillus lentus*, *Bacillus brevis*, *Bacillus stearothermophilus*, *Bacillus alkalophilus*, *Bacillus amyloliquefaciens*, *Bacillus coagulans*, *Bacillus circulans*, *Bacillus lautus*, *Bacillus megaterium*, *Bacillus thuringiensis*, *Streptomyces lividans* and *Streptomyces murinus*.
- Claim 171. (New.) The recombinant host cell of claim 165, wherein the host cell is *Bacillus licheniformis*.
- Claim 172. (New.) A method for producing a variant alpha-amylase, which method comprises: (a) cultivating a host cell comprising the nucleic acid of claim 160 and (b) recovering the variant alpha-amylase from the host cell.
- Claim 173. (New.) The method of claim 172, wherein the host cell is a bacterial cell.
- Claim 174. (New.) The method of claim 172, wherein the host cell is a fungal cell.
- Claim 175. (New.) The method of claim 172, wherein the host cell is a yeast cell.
- Claim 176. (New.) The method of claim 172, wherein the host cell is a species of *Bacillus*.
- Claim 177. (New.) The method of claim 172, wherein the host cell is selected from the group consisting of *Bacillus subtilis*, *Bacillus lentus*, *Bacillus brevis*, *Bacillus stearothermophilus*, *Bacillus alkalophilus*, *Bacillus amyloliquefaciens*, *Bacillus coagulans*, *Bacillus circulans*, *Bacillus lautus*, *Bacillus megaterium*, *Bacillus thuringiensis*, *Streptomyces lividans* and *Streptomyces murinus*.
- Claim 178. (New.) The method of claim 172, wherein the host cell is *Bacillus licheniformis*.

Claim 179. (New.) The method of claim 172, wherein the variant alpha-amylase is secreted from the host cell.